Prepared for:
USAID-SARI/Energy Program
www.sari-energy.org

Concept for Financing of Industrial Energy Efficiency/Conservation Projects

Sri Lanka

Nexant

Revised June 2003

Concept Paper

Financing of Industrial Energy Efficiency/Conservation Projects

Sri Lanka

For

United States Agency for International Development

Under

South Asia Regional Initiative for Energy

Prepared by

NEXANT SARI/Energy

Acknowledgement

On behalf of USAID, the Nexant SARI/Energy team wishes to thank the following key stakeholders for their contributions in developing this Concept paper

Deepal Peiris
National Development Bank

K.L.S. Kaviratne
National Development Bank

Piyal Hennayake
Hatton National Bank

Shanaka Fonseka
Hatton National Bank

Sunil De Silva
DFCC Bank

Senaka Jayasinghe
DFCC Bank

Leonie Seneviratne
Seylan Bank

Sirilal Amarasinghe
Seylan Bank

Gamini Jayadeva
Commercial Bank

Mohan Fernando
Commercial Bank

Ravindra Pitigala
Lanka Transformers Limited

Dammika Nanayakkara
LTL Energy

Gamini Senanayake
Industrial Services Bureau

Ronald Comester
Ceylon Electricity Board

Sisira Vitharana
Ceylon Electricity Board

Anuruddha Dias
Hayleys Industrial Solutions

Harsha Wickremasinghe
Energy Conservation Fund

Contents

Executive Summary

The overarching consideration in proposing the creation of the Sri Lanka Energy Efficiency Fund is to design an approach that can act as a *sustainable* incentive for increased financing of energy efficiency projects. With this consideration in mind we sought to enlist the ideas from banks, energy service companies, and government officials to help us refine our concept to ensure that the Fund would gain acceptance by potential Fund participants. Our Concept Paper seeks to reflect these realities.

The Concept Paper will seek to present a practical framework that can be utilized in the creation of the Sri Lanka Energy Efficiency Fund ("Fund"). The Paper will outline the purpose of the Fund to illustrate how the Fund will contribute to the goals of the Regaining Sri Lanka Plan; the Paper will consider "best practices" of various fund approaches on a worldwide basis that have been used effectively to promote investment in energy efficiency projects; the Paper will also examine a number of energy efficiency fund mechanisms used in Sri Lanka, considering the strengths and weaknesses of each; and, finally, the Paper will propose the creation of the ***Sustainable Guarantee Facility*** or SGF mechanism: an approach that would have the Fund provide a repayment guarantee to commercial banks for loans made to targeted energy efficiency projects.

In this paper we considered a traditional direct loan scheme versus the loan guarantee mechanism as recommended under the ***Sustainable Guarantee Facility.***

The Direct Loan Structure has the immediate advantage of readily available direct, fixed-interest rate funding to project borrowers at rates of interest that are likely to be lower than those offered by commercial banks. In addition, the Direct Loan Structure will likely have longer repayment terms than similar commercial financing. The Direct Loan Structure has been used to finance projects in areas unlikely to be priority lending sectors for commercial banks.

The major drawback with the Direct Loan Structure is that once the Fund is fully loaned-out no further resources are available to support additional projects. The Direct Loan Structure also requires greater administrative costs for the Fund given the need for loan documentation and administration in addition to the costs of credit and project evaluation. The Fund would essentially become a bank with full responsibility to properly conduct credit evaluation, prepare and process loan documentation, handle loan disbursements, take direct commercial risk, and seek to perfect liens or mortgages on equipment and property. Finally, perhaps the most important drawback with the Direct Loan Structure is that this approach does not build the capacity nor improve the relative competence of commercial banks to lend for energy efficiency projects.

The main purposes of the SGF are to make possible bank lending for projects which the banks would otherwise probably not finance, and serve to lower the costs of financing for borrowers as an incentive to pursue energy efficiency projects. The most important overall reason to consider the SGF is that using this approach will *substantially increase the amount of funds available for energy efficiency projects.* Ultimately this will increase the number of projects thereby increasing the level of energy efficiency in Sri Lanka thereby creating economic benefits from lower energy

costs as well as improve the environment through the increased productivity of energy consumed.

Another important benefit of using the SGF approach is that loan documentation and processing for loans guaranteed by the SGF would done by commercial banks which have the existing personnel and procedures already in place to provide this service. The Fund would have to make a substantial investment to create the personnel and technical infrastructure necessary to make direct loans or grants.

Importantly, the SGF resources will be available in perpetuity to provide loan guarantees in accordance with the Fund's Operating Guidelines. Upon successful payback of a guaranteed loan, the reserves of the SGF backing the loan will be free to back new loans. Traditional direct lending or grants approach by the Fund would support individual projects and would be unavailable after it spent.

An important additional benefit of the SGF concept is that the funds backing the SGF can be invested in interest-bearing accounts or in highly-liquid securities. This interest and/or investment income can help to offset the operating costs of the Fund. A critical point, however, is that the Funds should be placed in the safest, most liquid form of investment to ensure the strength of the loan guarantee under the SGF.

In our meetings with the banks to discuss the SGF, the bankers were nearly unanimous in supporting the concept. In their view funds are available to support energy efficiency projects, however, the main barriers to increased bank support for such projects are the collateral requirements for bank lending which can inhibit end-user pursuit of energy efficiency projects. The nature of energy efficiency projects, with repayment for the loan generated by energy savings, is more related to lending on a project-finance or cash-flow basis rather than an asset collateral basis.

It was also noted in our meetings that with the relatively high energy tariffs a number of sound projects could be pursued, however, a major obstacle is the relatively small size of many projects which are not able to attract financing. Also, concessional funding or soft-loan terms are not needed as customers are willing to consider energy efficiency projects, however, the idea of the loan guarantee is important given that the customers can essentially finance the loan out of the cash flows from the energy savings.

The meetings provided value input into how the Facility could successfully achieve its mission:

- Make sure the Fund provides clear guidelines regarding the types of projects it will support
- The Fund should have in-house technical expertise that the participating banks could draw upon to help evaluate project proposals.
- Have a designated officer within each participating bank as the contact for the Fund.
- Have a straightforward application process.
- Work to create awareness of the Fund and what it offers.

In summary, the SGF is a proven and cost-effective model to create a substantial increase in sustainable funding for a large numbers of energy efficiency projects.

Within the proposed SGF, the Paper will make recommendations in the following areas:

- Project Guidelines
- Proposed sources of funding
- Types of projects
- Institutional framework
- Fund management
- Project credit standards
- Guarantee application process

The Paper will also contain an attachment of Meeting Notes that reflect the feedback gained from initial discussions with banks and energy service companies in Sri Lanka regarding the SGF concept.

Section 1 Introduction

1.1 Background

In Sri Lanka, about **60%** of the population has access to electricity with an installed capacity of about 2,000 MW (2 GW), of which around **60%** is hydropower and the rest is thermal (oil based). Heavy dependence on hydropower, with the demand for electricity increasing at around **8%** per annum, caused power shortages during drought periods in 1996, 1998, and 2001, affecting industry and the economy as a whole.

With almost all economically viable hydro resources now developed, the emphasis is now on the addition of thermal power to meet the increasing demand for energy from both the domestic and industrial sectors. However, increased electricity costs as a result of large additions of oil-based thermal generation to the electricity grid have affected the industrial output.

In order to mitigate the impact of high electricity tariffs and the possible environmental impact from increased thermal generation, energy conservation/efficiency is promoted aggressively in Sri Lanka, with a **30%** to **40%** energy-saving potential in industry from cost-effective end-use improvements.

The importance of energy conservation/efficiency has been recognized in Sri Lanka, but barriers such as lack of policy, knowledge, technology availability, and concessionary funding have hindered the widespread commercialization and large-scale implementation of end-use energy-efficiency improvements.

In this context, an important step has been taken by the United States Agency for International Development (USAID) under the technical assistance component of the South Asian Regional Initiative for Energy (SARI/Energy) to develop mechanisms to promote end-use efficiency and conservation in industry.

1.2 SARI/Energy Objectives

South Asian Regional Initiative for Energy (SARI/Energy) aims at promoting mutually beneficial energy linkages among the participating nations. A key component of this is the promotion and development of Energy Service Company (ESCO) activities in the region to reduce energy costs to industry.
The components of ESCO development activities under SARI/Energy are:

- Business development & financing;
- Introduction to monitoring and verification protocols;
- Development of a financing mechanism for ESCOs;
- Certification and training of energy auditors;
- Establishment of a South Asia network of ESCOs.

1.3 Markets Component — M&V protocol

Considerable opportunities exist for improving energy efficiency in every sector of the Sri Lankan economy. Actual investments being made today are but a small fraction of the economically attractive investments available. One of the barriers to

increased investment is the lack of consistent and objective procedures and guidelines for quantifying energy savings. Measurement and verification protocols establish a common framework and define acceptable procedures for determining savings from energy-efficiency and energy conservation projects. Formally adopting a standard M&V protocol will result in more reliable energy saving estimates and improve lender confidence for securing lower cost financing for energy-efficiency projects.

In this light, under the technical assistance component of the USAID funded South Asia Regional Initiative for Energy project a Sri Lanka-specific M&V protocols has been developed based on the International Performance Measurement and Verification Protocol (IPMVP) and the Indian M&V protocol, for independently verifying energy savings and energy cost savings in ESCO contracts.

1.4 ESCOs

Energy Services Companies (ESCO) have been established to assist utility users in the reduction of overall utility costs, which introduces a concept of guaranteed savings from an energy efficiency project at a customer installation at no cost to the customer, which benefits both the customer and the ESCO.

ESCOs develop and implement energy-efficiency projects that support themselves financially based upon the measured and verified savings that these projects generate. ESCOs often guarantee the savings to be realized and typically an agreed percentage of the savings is paid by the client to the ESCO to cover the cost of the services while simultaneously leading to positive cash flows for the client. This service from ESCOs is often termed “performance contracting.” Although the ESCO concept is relatively new to Sri Lanka, a number of successful industrial energy efficiency/conservation projects to have already been undertaken/completed.

Section 2 Purpose

The purpose of the Sri Lanka Energy Efficiency Fund ("the Fund") is to provide financial incentives for supporting *sustainable* energy efficiency projects aimed at increasing the productivity of energy to achieve rapid economic growth as outlined in, "*The Future – Regaining Sri Lanka*."

The Fund will contribute to meeting the four challenges outlined in the Regaining Sri Lanka Plan by acting as a catalyst to channel and increase private-sector investment and financing of energy efficiency projects. The Fund is designed to realize increased energy capacity, without increasing the public debt burden, through enabling the financing of projects that can capture the currently untapped resources available through energy efficiency investments.

As noted in the Regaining Sri Lanka Plan, "Raising productivity is the key that will allow businesses and farmers to compete more effectively at home and in overseas markets." The Fund contributes directly to this objective by catalyzing investments that will reduce the costs of energy, as well as increase the efficiency, for Sri Lankan businesses. The benefits of energy efficiency investments for common energy saving measures are well-known based on worldwide experience:

- Installation of new building equipment such as chillers, boilers, industrial motors and pumps, and heating, ventilating and air conditioning equipment has been found to be **40%** more energy efficient than equipment older than 30 years;

- Installation of variable-speed controls to existing motors, such as those used in tea drying fans, can reduce energy used by **25-30%**;

- Replacement of conventional lighting with high efficiency lighting can be **40%** more efficient…importantly, lighting can account for **50%** of total energy consumption in large buildings;

- Installation of sensors and controls can upgrade a company's entire industrial processing with more efficient processing;

- On average, projects developed and implemented by energy service companies ("ESCOs") in the United States reduced energy consumption by **17%-36%**

  For Regaining Sri Lanka Plan, the major value offered by the Fund is that investments in energy efficiency can increase the productivity of business at little or no cost to the business given that the investment pays for itself through energy savings. Importantly, many energy efficiency projects can be implemented with relatively short paybacks of one and two years.

Section 3 Best Practices of Selected Fund Approaches Worldwide

The purpose of examining various approaches used in energy efficiency funds worldwide is consider successful models that could serve as guidelines for potential application, with adaptations based on local realities, to the Sri Lanka Energy Efficiency Fund.

The objective of this examination is to help the Sri Lanka Energy Efficiency Fund determine the types of financial mechanisms that can provide financial incentives that will support *sustainable* and replicable energy efficiency projects. The Fund should select those structures that catalyze increased public- and private-sector financing of energy efficiency projects. Importantly, the Fund should select those structures that will to leverage its resources to the greatest extent possible.

3.1 Loan Guarantee Mechanism

The World Bank, through the Global Environment Facility, has supported a number of successful energy efficiency guarantee programs in other countries.

In Hungary, the *Energy Efficiency Guarantee Program* provided loan guarantees to Hungarian financial institutions for both individual loans as well as a portfolio guarantee that provided a blanket guarantee to help to facilitate small loans. This Program, implemented by the International Finance Corporation (IFC) and the Global Environment Facility (GEF) as the "Hungary Energy Efficiency Finance Guarantee Program" is an interesting example. Under this Facility, the GEF contributed a $5 million grant with the IFC contributing another $8+ million in reserves. The Facility then used this capital to create a two-tiered Guarantee Facility Agreement with a local financial institution broken into a *Transaction Guarantee* and a *Portfolio Guarantee*.

The *Transaction Guarantee* was provided to the local financial institution for repayment of energy efficiency loans that it made to three classes or borrowers: 1) end-users who received loans directly from the financial institution; 2) leasing companies who used the loans from the financial institution to offer lease financing to end-users, and 3) ESCOs who used the loans to finance energy service agreements with end-users.

The *Portfolio Guarantee* was made to the local financial institution for small energy efficiency loans and leases to end-users. The Program provided a repayment guarantee, and co-funded a loan loss reserve, for loans comprising the portfolio.

In China, the *Energy Efficiency Guarantee Facility* offered co-financing for loan loss reserves with a Chinese guarantee agency that provided loans guarantees to Chinese financial institutions that in turn provided loans for energy efficiency projects. Under this structure, the GEF offers co-financing for loan loss reserves with a Local Guarantee Agency in China, and the GEF agrees to cover first losses under the *Facility.*

The Local Guarantee Agency has a *Guarantee Facility Agreement* in place with a Local Financial Institution who makes energy efficiency project loans to three classes of borrowers as follows: leasing companies, who structure equipment lease financing to end-users; end-users; and, energy management companies who finance Energy Services Agreements with end-users.

The *Guarantee Program* mechanism is used by most of the world's export credit agencies in some form or another, including the Export-Import Bank of the United States, Hermes – Germany, and Coface - France. For the fiscal year 2000, the Export-Import Bank of the United States authorized U.S.$12.6 billion in export financing with just 8 direct loans out of a total 2,529 authorizations, the remainder being either Loan Guarantees or Insurance to banks.

3.2 Conditional Loan as a Vehicle to Support ESCO Projects

A Conditional Loan could certainly be important for end-user customers to finance energy efficiency projects, but perhaps serve as an even more critical resource for thinly-capitalized ESCOs who may have great potential to identify and implement successful projects. In many parts of the world currently, ESCOs do not have strong balance sheets, hence have inadequate ability to borrow funds to implement business solutions on a turnkey basis.

One question the Fund should address is, "will the Fund be willing to invest in such thinly-capitalized ESCOs notwithstanding that these ESCOs may have an energy service contract with a creditworthy customer?"

One potential solution to the ESCO "problem" would be to create a loan structure in which the energy service performance contract payments made by the customer to the ESCO are made into a *collateral control account or escrow account* within the Fund that would serve to capture the payments to service the principal and interest on the Fund's loan. By capturing the customer payments the Fund would then be essentially betting on the ability of the ESCO to properly perform their service under the contract.

Such a structure has been used by the U.S. Export-Import Bank to finance a Northrop Grumman contract to supply equipment/services to the air traffic control authority of the Republic of Georgia, Sakaeronavigatsia (SAK). In this case, SAK submits airline overflight billing data to the International Air Transport Association based in Switzerland, which then aids in the collection of overflight revenues. Airlines, both western and those of the Newly Independent States, pay overflight fees into an *escrow account* in Switzerland. Bank of New York makes the loan to SAK to purchase the equipment and services with Ex-Im Bank providing Bank of New York with a **100%** repayment guarantee. The semiannual principal & interest payment is made from escrow account, with excess funds, above reserve and debt service, paid to SAK. The risk to U.S. Ex-Im Bank in this case is basically the performance ability of SAK to properly monitor and transmit overflight date, and the creditworthiness of the airlines making the overflight payments. Ultimately, Ex-Im Bank became comfortable with SAK's ability to perform their contractual obligations, but created an escrow account to gain greater security for repayment of the loan.

The Conditional Loan could contain enhanced terms, such as longer-than-usual repayment terms or concessional interest rates, or may be in the form of a "conditional grant." SELCO-India (SI), a solar electric lighting company selling household photovoltaic systems, is a U.S.-India joint venture company formed to sell solar home systems to rural households in Southern India. In 1996, SI received a $150,000 *Conditional Grant* under the USAID's RECOMM project.

SI's business plan was based on using highly trained employees to provide excellent customer service in the form installation and service, and provide extended manufacturers' warranties.
SI's most important business plan component focused on ensuring ability of its low-income customers to pay for the systems. SI required a **25%** downpayment from customers and set the monthly payments at a level comparable to that of existing payments the households made for lighting and batteries.

SI recognized its core competencies were in providing service so it outsourced the credit and collections function to existing micro-credit financial institutions. The *Conditional Grant* was staggered into three tranches based on SI achieving certain objectives. Given the success of SI in achieving its objectives, SI was able to attract $2.5 million in additional investment from outside investors including E&Co and IREADA. In just three years, SI's profitability enabled the initial repayment of the *Conditional Grant*.

3.3 A Utility as the main borrower for ESCO projects

Another international example is the *National Electric Utility of Croatia* (NUEC) as essentially acting in the role of a "Super ESCO." A Croatian financial institution provided loans to NUEC for energy efficiency projects with NUEC having direct responsibility debt service payments. NUEC, in turn, provided capital to energy efficiency equipment suppliers and smaller ESCOs who then provided turnkey projects and services to end-users. NUEC also provided energy efficiency project marketing, auditing, and procurement services to these same end-users. The end-users paid for the ESCO projects out of utility bill payments to NUEC.

A classic, but much more simple, international example concerned a "design-build" contract model in Mexico in which the ESCO delivers energy efficiency equipment and warrants energy savings with the end-user customer paying the ESCO in cash. The design-build mechanism worked well for end-user customers with excess cash to invest and resulted in more than 100 projects implemented, including projects for Mexican banks Bancomer, Banamex, and Banca Serfin, as well as department stores and exporters.

3.4 Interest Rate Buydown Grant

Under this mechanism, the Fund could significantly lower the costs of borrowing by the end-users by combining the *Interest Rate Buydown Grant* with the Loan Guarantee provided under the *Sustainable Guarantee Facility.* Using this arrangement, the participating financial institution or guaranteed lender could large a lower nominal interest rate to the borrower.

The *Interest Rate Buydown Grant* would be important not only to overcome existing barriers and increase the focus on potential energy efficiency investment, by also serve as the primary stimulus to ultimately increase the numbers of innovative energy-efficiency loan transactions.

With projects brought about through the *Interest Rate Buydown Grant* mechanism a greater level of financing and co-financing can be achieved. The basic mechanism for the *Interest Rate Buydown Grant* would have the Fund create an interest-earning escrow account within the participating financial institution or guaranteed lender that would make up the difference between the lower rate charged to borrower and that rate which would be normally charged by the bank with Fund's repayment guarantee.

The escrow account would be drawn upon at each loan principle and interest payment by the guaranteed lender as an add-on to the lower loan interest rate. The amount of the escrow account funded by the *Interest Rate Buydown Grant* would be calculated on a net present value basis using the escrow account deposit interest rate as the discount rate.

For a loan guaranteed **100%** by the Fund under the *Sustainable Guarantee Facility,* the participating financial institution or guaranteed lender is allowed to charge a maximum interest rate of **10%**. The *Interest Rate Buydown Grant* would buy-down the interest rate by a maximum of **5%**, and be set at a maximum of US$20,000 per loan. The costs of the *Interest Rate Buydown Grant* to the Fund for each loan would be lowered by the amount of the downpayment by the borrowers, which should range between **10-20%**.

The *Interest Rate Buydown Grant* could also be a stand-alone product of the Fund not offered in combination with a Loan Guarantee. It should be noted, however, that the loan guarantee option under the *Sustainable Guarantee Facility* would also serve to lower the nominal interest rates charged to the borrowers by eliminating the risk of default for the commercial bank.

An international example of an Interest Rate Buydown type mechanism is Poland's National Fund for Environmental Protection and Water Management, and its executing subsidiary the Bank for Environmental Protection or BOS Bank. The National Fund provides financing for projects primarily in the form of "soft loans." The National Fund is limited to a maximum support level of **70%** per project. The soft loans provide for a subsidized interest rate, which is calculated as a **20%** coefficient of the Polish inflation rate. For example, assuming an inflation rate of **30%**, the **20%** coefficient would result in an interest rate of **6%** for zloty-based lending.

Award of a loan is conditional upon the satisfactory review of the environmental benefits of the project as well as the borrower's creditworthiness, business plan, and proposal of loan repayment security. For projects in which the amount requested exceeds $225 thousand, the National Fund requires that the project suppliers or executors be selected through a competitive bidding process. The National Fund works very closely with the BOS Bank in which it has a **47%** ownership share. The BOS BANK and other Polish banks service loans granted by the National Fund.

The BOS Bank's has on staff both *environmental and credit officers* who perform due diligence for each loan to analyze the expected environmental outcome, cost efficiency of the project, and expected repayment. The Bank's customer base is comprised roughly of corporations, both public and private companies, which represent **60%** of total lending and municipal governments, which represent **30%**. In accordance with Polish Central Bank regulations, the Bank *limits exposure for any one transaction to a maximum **10%** of its total equity.*

3.5 Direct Loan Structure

The Direct Loan Structure has the immediate advantage of readily available direct, fixed-interest rate funding to project borrowers at rates of interest that are likely to be lower than those offered by commercial banks. In addition, the Direct Loan Structure will likely have longer repayment terms than similar commercial financing. The Direct Loan Structure has been used to finance projects in areas unlikely to be priority lending sectors for commercial banks. The major drawback with the Direct Loan Structure is that once the Fund is fully loaned-out no further resources are available to support additional projects. The Direct Loan Structure also requires greater administrative costs for the Fund given the need for loan documentation and administration in addition to the costs of credit and project evaluation. The Fund would essentially become a bank with full responsibility to properly conduct credit evaluation, prepare and process loan documentation, handle loan disbursements, take direct commercial risk, and seek to perfect liens or mortgages on equipment and property.

3.6 USAID Development Credit Authority

Development Credit Authority (DCA) is a market-based credit enhancement mechanism that offers a flexible and effective tool for attracting private investment and mobilizing private capital in support of development objectives. DCA facilities are typically **50%** principal guarantees, used when USAID overseas missions decide that a credit enhancement will better serve local development interests than the more traditional grant programs.

The DCA provides loan guarantees covering up to **50%** of a lenders commercial risk on a project or portfolio of projects. Eligible borrowers may be private-sector firms, municipalities, and sub-sovereign entities if the central government owns less than **25%**; DCA cannot work with sovereign government entities. The term of the DCA Guarantee may extend to 20-years, however, most Guarantees have been issued for less than 10-year terms. Borrowers are not necessarily required to provide collateral for the loans; however, DCA would expect to receive **50%** of any collateral provided in the event of a loan default.

DCA will not provide a Guarantee to other donor capital, and typically is not interested in issuing a co-guarantee with another donor as USAID like to encourage private parties to put in some of their own capital at risk.

USAID can also offer technical assistance to its DCA partners to build capacity, to enhance efficiencies, to expand the availability of financial services, and to spur creativity in the financial institutions and sectors. In all cases, USAID works on the

principle that credit assistance should be available only if the activity would otherwise not receive funding from the market. Furthermore, DCA avoids moral hazard problems by sharing risk with private institutions.

Over the past several years, USAID/Bulgaria has successfully funded two energy efficiency activities in Bulgaria, which have helped to develop a groundswell of interest in energy efficiency among Bulgarian municipalities. The municipalities have organized themselves, with USAID assistance, to form the Municipal Energy Efficiency Network (MEEN) and have linked themselves with international energy efficiency organizations in Central and Eastern Europe. Despite the enthusiasm of the municipalities and the factual evidence of successfully implemented projects with positive financial returns, commercial banks in Bulgaria are still reluctant to provide the longer-term financing to municipalities necessary to fund such projects. Perception of risk, inadequate collateral on the part of municipalities and poorly prepared projects are often cited as the reasons for this phenomenon.

DCA has served to correct this market imperfection by providing the United Bulgarian Bank (UBB), a privately-owned Bulgarian bank, with a portfolio guarantee. Through this arrangement, USAID partially guarantees a series of loans made to various municipalities and some private sector enterprises to finance revenue-generating energy efficiency projects. Through this initiative USAID will mobilize $6,250,000 in local financial resources at a cost of $425,000 to the US Government. Financing is complemented by technical assistance provided to municipalities under the Municipal Energy Efficiency Program (MEEP) to aid them in designing and developing bankable projects.

Since the inception of this activity in late 1999, ten loans have been financed by UBB under the DCA guarantee amounting to about $1.6 million. The successful implementation of this activity has demonstrated that longer-term project financing is indeed an attractive investment option for commercial banks in Bulgaria. UBB has, in fact, indicated that positive experience with certain first-time borrowers has prompted it to expand its credit exposure to these entities.

Conclusion: It is possible that DCA could work with the Sri Lanka Energy Efficiency Fund's *Sustainable Guarantee Mechanism* perhaps as a Guarantor with capital invested in the fund by other banks, but this possibility will have to be explored with USAID.

Section 4 Fund Mechanisms used in Sri Lanka

4.1 EFRIENDS

The *EFRIENDS* was designed as an environmentally friendly solutions fund for industrial firms to provide Technical Assistance and low-cost Loans for waste minimization, resource recovery and savings, and pollution control and abatement. For energy efficiency, *EFRIENDS* would provide support to facilities that would save/reduce consumption of energy and/or save/reduce resources that produced energy; this support included electrical equipment/machinery that reduced overall consumption of energy and increased efficiency.

EFRIENDS was funded by the Japanese Bank for International Cooperation ("JBIC") and administered by Sri Lanka's National Development Bank. Sri Lankan banks participating in *EFRIENDS* included Hatton National Bank, Commercial Bank, DFCC Bank, Sampath Bank, and Seylan Bank.

EFRIENDS Loans offered the following conditions:

- Loans could be obtained for up to **100%** of the cost of a project up to a maximum of Rs. 50 million per enterprise as a term loan
- If the project also resulted in increased profitability that the loan could be obtained for a maximum **70%** of the project cost
- Nominal interest rate of **8.5%** (**0%** real interest rate)
- Repayment terms of 10 years, inclusive of a maximum grace period of 2 years
- Security for the loan normally a mortgage over the project assets

EFRIENDS Technical Assistance Loans offered the following conditions:

- Interest free loan to cover consultant services directly related to the investigation of energy efficiency measures as well as design, supervision, installation and commissioning of equipment.
- Reimbursement of **75%** of the cost subject to a maximum of Rs. 750,000
- Maximum repayment period of 5-years including a 1-year grace period
- Only available to firms that also obtained the project loan

The major positives of the *EFRIENDS* loan scheme was that it offered an attractive interest rate of **8.5%** for maximum loan terms of 10-years with 2-years grace periods. In addition, the scheme offered **100%** financing which was a very attractive feature since most banks require **30-40%** downpayment for loans.

The major negatives of the *EFRIENDS* loan scheme were the delays in gaining approvals for loan applications and the fact that once the resources of the scheme were fully loaned out, the scheme finished as a source of financing for projects. Another major drawback mentioned was that the scheme normally required collateral from the borrower in the form of a mortgage over the assets.

A number of the banks we met with had past experience in energy efficiency lending under the *EFRIENDS* loan scheme, however, the following drawbacks were noted:

- Documentation requirements too complex
- Took too long to get loans approved
- Took too long for funds to disburse
- The bank's own retail staff not well informed about the scheme so it was not as active as it could have been

4.2 Power Factor Correction Loan Scheme

The Power Factor Correction Loan Scheme ("PFC Loan Scheme") was a mechanism funded by the Ceylon Electricity Board designed to help industrial enterprises affect corrective action to enhance the power factor in their respective facilities.

The National Development Bank and the DFCC Bank were the on-lending institutions for the PFC Loan Scheme. The funds provided by the Ceylon Electricity Board to these institutions were offered at an interest rate of **8%**, which was on-lent to customers at **12%**, with a 2-year repayment period. The grace period offered for the loan depended upon the customer; no security was required for the loan. The loan was made only after approval of the demand-side management branch of the Ceylon Electricity Board based on their evaluation of the technical feasibility of the project. The Bank's undertook the credit risk of lending to the customer.

The PFC Loan Scheme was succeeded by the *EFRIENDS* scheme which offered 10-year loan terms at **8.5%** interest.

The major positives of the PFC Loan Scheme were the following:

- The scheme offered targeted financing for energy efficiency
- The interest rate at the time was at an attractive level
- The scheme provided a source of funds

The major negatives of the PFC Loan Scheme were the following:

- The repayment terms were relatively short at 2-years
- The Bank's were obligated to take the credit risk of lending to the customer
- The scheme offered finite resources in the form of funding to the banks…as such the scheme didn't leverage additional resources for energy efficiency projects

Section 5 Proposed Sustainable Guarantee Facility

The ***Sustainable Guarantee Facility*** or SGF is an approach that would have the Fund provide a repayment guarantee to commercial banks for loans made to targeted energy efficiency projects. The main purposes of the SGF are to make possible bank lending for projects which the banks would otherwise probably not finance, and serve to lower the costs of financing for borrowers as an incentive to pursue energy efficiency projects. The most important overall reason to consider the SGF is that using this approach will *substantially increase the amount of funds available for energy efficiency projects.* Ultimately this will increase the number of projects thereby increasing the level of energy efficiency in Sri Lanka thereby creating economic benefits from lower energy costs as well as improve the environment through the increased productivity of energy consumed.

The basic idea behind the SGF is that the Fund resources would be set aside or reserved according to a certain percentage based on estimated loan losses. Assuming a conservative estimate by establishing the reserve at **25%**, the Fund could support four times the amount of energy efficiency projects. Assuming an initial fund of U.S.$2 million, the SGF could support U.S.$8 million in energy efficiency projects. It should be noted that this $8 million figure does not include income from fees that the Fund could charge to provide its guarantee, the amount of the downpayment by the borrowers that should range between **10%-20%**, nor does it include the interest earned by the SGF.

Given that the SGF operates of a reserve fund, the resources making up the reserve fund can earn interest by being invested in short-term investment-grade accounts. The important point is that *the reserves in the SGF will only be used in case of borrower payment default to the guarantee bank.*

The SGF will seek to limit such defaults by establishing prudent credit standards for projects, which it guarantees. A range of guarantee options could also be selected by the Fund starting from a **100%** loan guarantee to some lower guarantee percentage such as **70%** or **80%**.

Another important benefit of using the SGF approach is that loan documentation and processing for loans guaranteed by the SGF would done by commercial banks which have the existing personnel and procedures already in place to provide this service. The Fund would have to make a substantial investment to create the personnel and technical infrastructure necessary to make direct loans or grants.

Importantly, the SGF resources will be available in perpetuity to provide loan guarantees in accordance with the Fund's Operating Guidelines. Upon successful payback of a guaranteed loan, the reserves of the SGF backing the loan will be free to back new loans. Traditional direct lending or grants approach by the Fund would support individual projects and would be unavailable after it spent.

In summary, the SGF is a proven and cost-effective model to create a substantial increase in sustainable funding for a large numbers of energy efficiency projects.

5.1 Proposed Operating and Management Principles

The test of an energy efficiency fund's effectiveness is the ability of the fund is to act as a *sustainable* incentive for increased financing of energy efficiency projects. With this mind, the recommended operating and management principles for the Fund are as follows:

1. The Fund should seek to leverage its resources to the greatest extent possible by providing loan guarantees to lending institutions that would be otherwise unwilling to provide loans for energy efficiency projects at affordable interest rates.

2. The Fund should operate as a reserve fund available in perpetuity to provide loan guarantees in accordance with its Operating Guidelines.

3. The Fund should seek to sustain its resources through fee generation and by establishing prudent credit standards for projects that chooses to guarantee.

4. The resources of the Fund should be housed in the Ministry of Finance of Sri Lanka or an investment-grade financial institution that will act as custodian of the Fund's resources. The Fund's resources will be invested only in short-term investment-grade accounts.

5. The Fund should establish clear standards regarding the types of projects it seeks to support, the mechanisms for this support, the criteria used to consider application requests, and establish a transparent approach with respect to how to access the Fund resources.

6. The Fund should have the in-house capability to properly analyze the financial and technical viability of energy efficiency project proposals that it receives.

5.2 Proposed Project Guidelines

The Fund should seek to support projects through financial mechanisms aimed at funding replicable projects and reducing the costs and perceived risks for end-user energy efficiency projects.

The Fund as a general principle should seek to support projects per the following criteria:

a. Projects which demonstrate the economic and productivity advantages of energy efficiency investments;

b. Projects that have a high probability of replication in the future;

c. Projects using technology that is proven in terms of its feasibility and effectiveness;

d. Projects that have a clear payback timeframe and are financially capable of repaying the principal and interest amount of the project loan;

e. Project sponsors who have the technical and managerial capabilities to successfully complete and the mange the project;

f. Projects in which the Fund can *leverage* additional financial support from sponsors, vendors, and other financial institutions

Such projects would include, but not be limited to:

- air conditioning and lighting upgrades
- replacement of lighting and air conditioning systems
- replacement of chillers, boilers, pumps and motors
- installation of controls for electricity consumption
- new building insulation
- cogeneration and secondary heat recovery systems

5.3 Proposed Project Credit Standards and Information Requirements

The Fund's proposed credit standards and information requirements are designed to serve as clear, transparent guidelines to qualify borrowers, lessees, and end-users for Fund support. The idea here is to make access to Fund support relatively easy and straightforward in order to generate a greater number of project applications.

5.4 Proposed Information Requirements

***Summary Description of the Project*:** Purpose of the project, type of equipment and services required for the project along with a cost breakdown of each, starting and ending date of the project, and estimated amount of energy savings per month.

1. Detailed description of the project to include project location and the economic and productivity advantages of the project from an energy efficiency standpoint.

2. Detailed description of the product technology and its application to energy efficiency.

3. A breakdown of the anticipated projects costs, including product technology, throughout the life of the project.

4. Financial projections of the project to include an annual cash flow forecast showing the cost benefits of the energy savings, including the simple payback period of the project investment, for the period of the Fund's Loan or Lease.

5. Concise description of the borrower or lessee's company origin, legal status, ownership, business activities, primary markets, subsidiaries, affiliates, and commonly-owned companies.

6. Latest three years audited financial statements on the borrower or lessor; include auditor's opinion and notes to the financial statements.

7. Bank credit reference on the borrower or lessor detailing high credit, terms, and overall payment experience.

A summary of the anticipated project-financing plan, including proposed sources, amount, and terms of the debt and equity investment for the project.

5.5 Proposed Credit Standards

5.5.1 For Residences or Individuals

- The borrower must be current on their and electric bills
- The borrower must maintain or open a bank account
- The borrower must have worked for their current employer at least two years
- The amount of the loan payments for the energy efficiency project must not exceed **33%** of the borrower's current level of pre-tax earnings
- The borrower must provide at least one co-signer for the loan. The co-signer must be a person different from the borrower's employer

5.5.2 For Private-Sector Companies

- The borrower must be current on their electricity bills
- The borrower must have positive operating cash flow in the latest year
- The borrower must have positive net income over the latest 2 years

5.5.3 For Public-Sector Borrowers

- The borrower must have a current, identified budget allocation for electricity
- The borrower must be current on their electricity bills
- The borrower may offer a repayment guarantee for the loan from a municipal government or appropriate Ministry

5.6 Credit Mitigants

The Fund's credit criteria are designed to serve as clear, transparent guidelines to qualify borrowers, lessees, and end-users for Fund support. Should a potential end-user fail to meet one or more criteria, a compelling rationale must be presented and mitigants be proposed to offset the credit risk of the project. Such mitigants may include the establishment of additional repayment guarantee, escrow accounts, or assignment of budget allocation or other reserve accounts.

5.7 Proposed Loan Guarantee Process

The Fund grants its support on the basis of an agreement concluded with the Guaranteed Lender financing the project after examining an application submitted by the entity according to the standard procedure used by the Fund.

The project review and implementation procedure is as follows:

1. Review of the Fund's Information Requirements to be provided with the borrower or bank's Application for Energy Efficiency Fund of Sri Lanka Support which considers the energy efficiency and economic benefits of the project as well as the borrower's creditworthiness, business plan, financing plan with proposed sources and amounts, and proposal of loan repayment security.

2. Certification from the Guaranteed Lender: Applicant bank certifies that it has performed reasonable due diligence in providing the information included in its application.

3. Technical review of the proposed project to determine the viability of the project technology in terms of its feasibility and effectiveness in increasing energy efficiency.

4. Preparation of a *Project Memorandum* by staff of the Fund for presentation to the Fund's designated manager containing the following information:

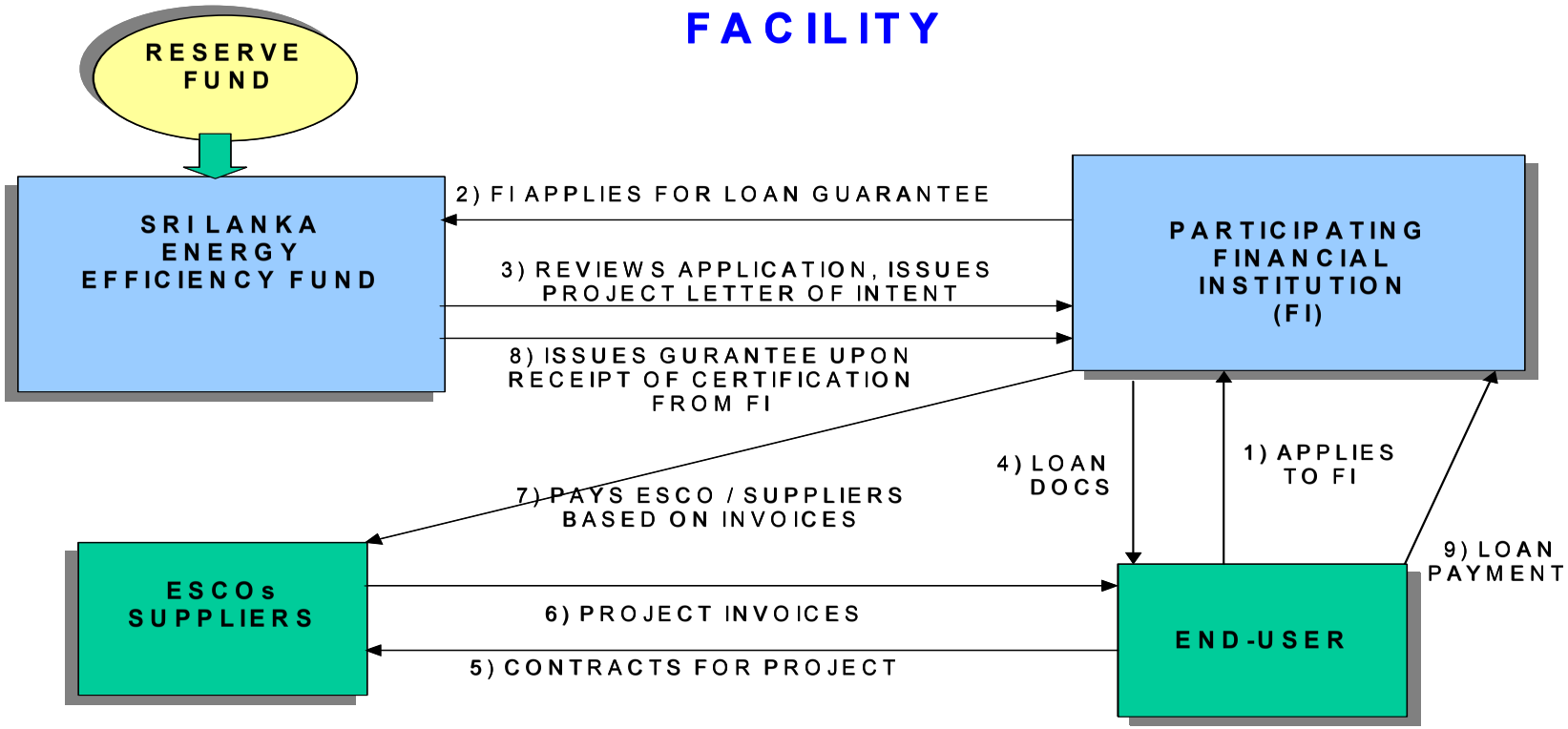
   a. summary of the project based the application review;
   b. recommendation to approve or deny Fund support for the project;
   c. suggested risk mitigants and conditions, if any, for Fund support of the project

   Upon approval of the Project Proposal by the General Fund Manager or, by approval of the Fund's Board in case the proposed support of the Fund exceeds $350,000 an offering of the *Energy Efficiency Fund of Sri Lanka Term Sheet* will be prepared for signature as an acknowledgement by both the project sponsor and end-user agreeing to the terms and conditions for the Fund's support.

5. Upon receipt of loan documentation between the Guaranteed Lender and the borrower, along with invoices to evidence purchase of the equipment and services provided under the loan, the Fund will provide the Guarantee in the form of a Guarantor signature on the promissory note issued by the borrower to the Guaranteed Lender.

6. In the event of the Fund co-financing a project with another financial institution, an *Inter-creditor Agreement* will be required as a condition precedent to the Fund's support.

7. Twice yearly reports signed by both the project sponsor and end-user verifying the status of the project in terms of its effectiveness at reducing energy consumption.


SUSTAINABLE GUARANTEE FACILITY
RESERVE FUND
SRI LANKA ENERGY EFFICIENCY FUND
PARTICIPATING FINANCIAL INSTITUTION (FI)
2) FI APPLIES FOR LOAN GUARANTEE
3) REVIEWS APPLICATION, ISSUES PROJECT LETTER OF INTENT
8) ISSUES GURANTEE UPON RECEIPT OF CERTIFICATION FROM FI
4) LOAN DOCS
1) APPLIES TO FI
7) PAYS ESCO / SUPPLIERS BASED ON INVOICES
9) LOAN PAYMENT
ESCOs SUPPLIERS
6) PROJECT INVOICES
5) CONTRACTS FOR PROJECT
END-USER

Section 6 Conclusions

Based on our initial discussions with banks and ESCOs we believe that the SGF mechanism is the most effective approach to achieve the goal of increased energy efficiency investment. The most important overall reason to consider the SGF is that using this approach will *substantially increase the amount of funds available for energy efficiency projects on a sustainable basis.*

Importantly, the SGF mechanism will also engage the public- and private-sector banks and energy service companies in the effort to generate increased energy efficiency investment in Sri Lanka. Ultimately this will increase the number of projects thereby increasing the level of energy efficiency in Sri Lanka thereby creating economic benefits from lower energy costs as well as improve the environment through the increased productivity of energy consumed.

In summary, the SGF is a proven and cost-effective model to create a substantial increase in sustainable funding for a large numbers of energy efficiency projects. Based on a moderate initial capitalization through international loan and grant funding, the SGF can serve as a reliable platform for future investment that can leverage a significantly greater amount of energy efficiency investment in Sri Lanka.

Appendix A Meeting Notes

The following meeting notes were taken from discussions with the Nexant team and banks and ESCOs held in Colombo, Sri Lanka during the week of March 31- April 4, 2003. The purpose of the meetings was to discuss the concept of the *Sustainable Guarantee Facility* that is under consideration as the main offering of the potential Sri Lanka Energy Efficiency Fund. The major objective of the meetings was to gain input from the banks and ESCOs as to the need for such a facility as well as the parameters under which it should operate. The basic concept was refined based on the input from the meetings culminating in a presentation of the refined concept at the Stakeholders' Meeting of the Proposed Sri Lanka Energy Efficiency Fund held on April 3, 2003. The presentation is attached.

Draft concept: Sustainable Guarantee Facility

The Nexant team introduced the draft concept for a Sustainable Guarantee Facility designed to provide loan guarantees to banks financing energy efficiency projects in Sri Lanka. The Nexant team considered other approaches such as direct loans, soft loans and grants, but concluded that the loan guarantee mechanism under the *Sustainable Guarantee Facility* would be the best approach at involving the banks, leveraging the resources of the Fund to the maximum extent, and building a Fund that could operate on a sustainable basis.

The Facility is envisaged to be the main product of the Sri Lanka Energy Efficiency Fund. The Facility is intended to stimulate energy efficiency investments by end-users as the result of the lower interest rates and longer terms, as well as the zero collateral requirements, made possible through the loan guarantee mechanism. The Facility will provide a **100%** repayment guarantee to banks for loans made to end-users meeting the Fund's credit standards.

The main purposes of the SGF are to make possible bank lending for projects which the banks would otherwise probably not finance, and serve to lower the costs of financing for borrowers as an incentive to pursue energy efficiency projects.

The most important overall reason to consider the SGF is that using this approach will *substantially increase the amount of funds available for energy efficiency projects.* Ultimately this will increase the number of projects thereby increasing the level of energy efficiency in Sri Lanka thereby creating economic benefits from lower energy costs as well as improve the environment through the increased productivity of energy consumed.

The basic idea behind the SGF is that the Fund resources would be set aside or reserved according to a certain percentage based on estimated loan losses. Assuming a conservative estimate by establishing the reserve at **25%**, the Fund could support four times the amount of energy efficiency projects. Assuming an initial fund of U.S.$2 million, the SGF could support U.S.$8 million in energy efficiency projects. It should be noted that this $8 million figure does not include income from fees that the Fund

could charge to provide its guarantee, the amount of the downpayment by the borrowers that should range between **10-20%**, nor does it include the interest earned by the SGF.

Given that the SGF operates of a reserve fund, the resources making up the reserve fund can earn interest by being invested in short-term investment-grade accounts. The important point is that *the reserves in the SGF will only be used in case of borrower payment default to the guarantee bank.* The SGF will seek to limit such defaults by establishing prudent credit standards for projects, which it guarantees. A range of guarantee options could also be selected by the Fund starting from a **100%** loan guarantee to some lower guarantee percentage such as **70%** or **80%**.

Another important benefit of using the SGF approach is that loan documentation and processing for loans guaranteed by the SGF would done by commercial banks which have the existing personnel and procedures already in place to provide this service. The Fund would have to make a substantial investment to create the personnel and technical infrastructure necessary to make direct loans or grants.

Importantly, the SGF resources will be available in perpetuity to provide loan guarantees in accordance with the Fund's Operating Guidelines. Upon successful payback of a guaranteed loan, the reserves of the SGF backing the loan will be free to back new loans. Traditional direct lending or grants approach by the Fund would support individual projects and would be unavailable after it spent.

Lanka Transformers Ltd.

The Nexant team presented the concept to Mr. Dammika Nanayakkara Manager, and Mr. Ravrindra Pitigalage – Financial Controller. Lanka Transformers Ltd. Operates as an ESCO and has had a good deal of experience in implementing energy efficiency projects in Sri Lanka. The company has implemented approximately 50 projects for 20 customers totaling SLRs 85 million to date. According to Mr. Nanayakkara, most projects have simple paybacks of 2 years so a guarantee supporting a 5-year loan would be ideal from the customers' viewpoint. We mentioned that with the Guarantee the banks should be willing to lower their interest rates. Mr. Nanayakkara opined that a **2%** reduction in commercial interest rates could act as an attractive stimulant to potential customers.

Mr. Pitigalage noted that with the relatively high energy tariffs a number of sound projects could be pursued, however, a major obstacle is the relatively small size of many projects which are not able to attract financing. According to Mr. Nanayakkara, concessional funding or soft-loan terms are not needed as customers are willing to consider energy efficiency projects, however, the idea of the loan guarantee is important given that the customers can essentially finance the loan out of the cash flows from the energy savings.

With respect to the type of projects that could be implemented, Mr. Nanayakkara noted that on average projects pursued by Lanka Transformers range in size from SLRs 5 million to 10 million. In his opinion the best potential for energy efficiency projects is in the hotel and garment industries for lighting and air conditioning

upgrades. In addition to these sectors, attractive project potential is also presented in the building, tea, processing, and small industry sectors.

We discussed the positives and negatives of the *EFRIENDS* loan scheme. According to Mr. Nanayakkara, the major positives of the *EFRIENDS* loan scheme was that it offered an attractive interest rate of **8.5%** for maximum loan terms of 10-years with 2-years grace periods. In addition, the scheme offered **100%** financing which was a very attractive feature since most banks require **30%-40%** downpayment for loans.

The major negatives of the *EFRIENDS* loan scheme were the delays in gaining approvals for loan applications and the fact that once the resources of the scheme were fully loaned out, the scheme finished as a source of financing for projects. Another major drawback mentioned was the that the scheme normally required collateral from the borrower in the form of a mortgage over the assets.

Overall, both Mr. Nanayakkara and Mr. Pitigalage liked the concept of the *Sustainable Guarantee Facility* as presented, especially if the Facility could serve to support smaller-sized projects and create a streamlined process.

Hatton National Bank

The Nexant team met with Mr. Piyal Hennayake – Assistant General Manager of Project Finance and Mr. Shanaka Fonseka – Manager of Project Finance. The concept was well received so most of our discussion focused on how we envisioned the *Sustainable Guarantee Facility* functioning from an operational standpoint.

Mr. Hennayake noted that the bank could support a loan term of 5 or 6-years maximum with a 1-year grace period with the Guarantee at an interest rate likely to be 2% under the bank's current commercial interest rates. The bank does not have a strict minimum loan size, however, the bank's Retail Division offers loans of U.S.$1,000. Mr. Fonseka made a strong point of suggesting that the Guarantee under the Facility should be easy to access. He also stressed the need for training the bank's retail staff on the details of the Facility.

We discussed the proposed Fund Credit Standards. Mr. Hennayake suggested that we add-in the requirement that the borrowers under the Facility submit a favorable credit report.

The bank had past experience in energy efficiency lending under the *EFRIENDS* loan scheme, however, the following drawbacks were noted:

- Documentation requirements too complex
- Took too long to get loans approved
- Took too long for funds to disburse
- The bank's own retail staff not well informed about the scheme so it was not as active as it could have been

National Development Bank

The Nexant team met with Mr. Deepal Peiris, Deputy Manager – Environmental Unit, and Mr. K.L.S. Kaviratne, Senior Manager – Corporate Banking. National

Development Bank ("NDB") has had considerable experience dealing with international funds, having been involved in loan schemes with the Japanese Bank for International Cooperation ("JBIC"), Germany's KfW, and the Asian Development Bank, among others.

Both Mr. Peiris and Mr. Kaviratne liked the *Sustainable Guarantee Facility* idea presented, especially the fact that the policies and procedures of the Facility are relatively simple and straightforward. They opined that a 5-year loan with a 1-year grace period should be sufficient for most energy efficiency projects.

Mr. Peiris and Mr. Kaviratne provided value input into how the Facility could successfully achieve its mission:

- Make sure the Fund provides clear guidelines regarding the types of projects it will support
- The Fund should have in-house technical expertise that the participating banks could draw upon to help evaluate project proposals.
- Have a designated officer within each participating bank as the contact for the Fund.
- Have a straightforward application process.
- Work to create awareness of the Fund and what it offers.

We discussed the idea of a "Pre-project Support Facility" similar to the Technical Assistance product provided by *EFRIENDS*. NDB thought that this could be useful, however, it could create more problems in terms of abuse by contractors and end-users…better to have a straight project loan guarantee than pre-project support grant of "soft" loan.

Industrial Service Bureau ("ISB")

The Nexant team met with Mr. Gamini Senanayake, Director, ISB to present the *Sustainable Guarantee Facility* concept and gain additional insight from an ESCO perspective. Mr. Senanayake liked the concept, especially given that it would involve the banks as marketing and implementation partners of the Fund. He felt this could help to disseminate the concept of energy efficiency among potential end-user customers. At the same time, however, this also presented a major challenge to the success of the concept: make sure the banks understand and appreciate energy efficiency projects through training and education of banks' staff.

A second major challenge cited by Mr. Senanayake is increasing the confidence level of customers to pursue projects in the first place. Challenges and problems with past initiatives such as *EFRIENDS* has been the long delays in implementing projects, and the fact that the initiatives have not been sustainable. Like NBD, Mr. Senanayake felt that the idea of a "Pre-project Support Facility" similar to the Technical Assistance product provided by *EFRIENDS* could create more problems in terms of abuse by contractors and end-users.

Commercial Bank of Ceylon

The Nexant team met with Mr. Gamini Jayadeva, Senior Manager – Development Credit, and Mr. Mohan Fernando, Executive Officer – Development Credit, to present the *Sustainable Guarantee Facility* concept and gain their input into the potential design of the Facility.

Mr. Jayadeva and Mr. Fernando both expressed support for the concept, but emphasized for the facility to be successful it must address the issues concerning both the lack of awareness of the benefits of energy efficiency and how such a Facility could operate, as well as create a streamlined mechanism to avoid delays in approving guarantee applications. The Facility should have clear project eligibility criteria communicated in a specific manner to assist both banks and customers in determining whether a project qualifies for support under the facility. Mr. Jayadeva also noted that, "Training and awareness are the most important factors in promoting usage of the Facility…training of the Bank's branches is a must."

Also noted as important was the suggestion that the Facility should support financing for technical training and maintenance for end-user customers, especially in cases where the project involves high technology. In addition, the Fund should have technical expertise to advise the banks on projects.

With respect to out question regarding the impact of the Fund's Guarantee on the level of interest rate the Bank could offer, Mr. Jayadeva noted that the Bank would likely charge a spread of 2 to **3.5%** over the their cost of funds which currently ranges from **8%-10%**. It was also suggested that the Fund should insist on a uniform interest rate to prevent banks from poaching customers from each other.

DFCC Bank

The Nexant team met with Mr. S.E. De Silva, Vice President – Wholesale Banking, and Mr. Senaka Jayasinghe, Senior Project Executive – Wholesale Banking, to present the *Sustainable Guarantee Facility* concept and gain their input into the potential design of the Facility. DFCC, along with the National Development Bank, has been the main administrator of previous credit lines from the EU, Germany's KfW, and the Asian Development Bank.

Mr. De Silva thought the concept of the loan guarantee through the *Sustainable Guarantee Facility* is a good idea, and a way to involve the banks in the promoting the Facility. With the Guarantee of the Facility, DFCC could likely offer a **2%** lower rate than their commercial loan rates, which currently range from **12%-13%**.

The biggest challenge for the Fund, according to Mr. De Silva, was overcoming resistance to implementing projects among skeptical end-user customers. He thought training and awareness programs could help address this challenge, and that the ESCOs could play a key role in the effort.

We also discussed the idea of the Fund offering a "Pre-Project Support Grant" or Technical Assistance Loan modeled after that of *EFRIENDS*, however, Mr. De Silva thought this approach to be problematic given that customers would likely pursue that

grant or soft-loan option over that of a project loan, and would be less committed to pursuing the project.

Seylan Bank

The Nexant team met with Ms.Leonie Seneviratne, Senior Deputy General Manager-Metropolitan Banking, and Mr. Sirilal Amarasinghe, Senior Manager – Development Finance Credit, to present the *Sustainable Guarantee Facility* concept and gain their input into the potential design of the Facility.

Seylan Bank had participated in the *EFRIENDS* scheme, and a Small and Medium-Size Lending Initiative.

Seylan Bank, according to Ms. Seneviratne, would not be too interested in participating under the Loan Guarantee mechanism envisioned under the *Sustainable Guarantee Facility* since the bank would require a funding source to make a 5-year loan for an energy efficiency project. According to her, "The Loan Guarantee offered by the Fund would not get special attention or make a positive difference with respect to interest rates unless there is a special credit line placed in Seylan Bank."